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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:
Hsien-Wei Chen, et al.

Serial No.: 10/801,475

Filed: March 16, 2004

For: System and Method of Heat
Dissipation in Semiconductor
Devices

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Attorney Docket No.: 24061.193
TSMC2003-1410

Customer No. 42717

Group Art Unit: 2812

Examiner: TBD

Conf. No.: 1783

TRANSMITTAL

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Enclosed for filing in the above-identified patent application.

1. Power of Attorney and Correspondence Address Indication Form;
2. Statement Under 37 CFR 3.73(b) with copy of Assignment; and
3. Return Receipt Postcard

Applicant believes no fee is due. However, the Director is authorized to charge any deficiency fees or credit any overpayments to Deposit Account No. 08-1394 of Haynes and Boone, LLP.

Respectfully submitted,

T. F. Bliss

Timothy F. Bliss
Reg. No. 50,925

Date: 8/2/04

HAYNES AND BOONE, LLP
901 Main Street, Suite 3100
Dallas, Texas 75202-3789
Telephone: 972-739-8638
Facsimile: 214-200-0853

Customer Number: 42717

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below:

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Name

8/2/2004

Date



PTO/9B/81 (09-04)
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**POWER OF ATTORNEY
and
CORRESPONDENCE ADDRESS
INDICATION FORM**

Application Number	10/801,475
Filing Date	March 16, 2004
First Named Inventor	Hsien-Wei Chen, et al.
Title	System and Method of Heat...
Art Unit	2812
Examiner Name	To Be Determined
Attorney Docket Number	24061.193 (TSMC2003-1410)

I hereby appoint:

☒ Practitioners associated with the Customer Number:

42717

OR

☐ Practitioner(s) named below:

Name	Registration Number

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please recognize or change the correspondence address for the above-identified application to:

☒ The address associated with the above-mentioned Customer Number:

OR

☐ The address associated with Customer Number:

☐ Firm or Individual Name Haynes and Boone, LLP

Address			
Address			
City	State	Zip	
Country			
Telephone	Fax		

I am the:

☐ Applicant/Inventor.

☒ Assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/95)

SIGNATURE of Applicant or Assignee of Record

Signature	<i>[Signature]</i>	Date	July 30, 2004
Name	Chien-Wei Chou	Telephone	011-886-3-563-6688
Title and Company	Director, IP Division, Taiwan Semiconductor Manufacturing Company, Ltd.		

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required. See below.

☒ Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PTO/SB/88 (08-04)
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STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: Hsien-Wei Chen, et al. 24081.193 (TSMC2003-1410)

Application No./Patent No.: 10/801,475 Filed/Issue Date: March 16, 2004

Entitled: System and Method of Heat Dissipation in Semiconductor Devices

Taiwan Semiconductor Manufacturing Company, Ltd., a Corporation
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.
The extent (by percentage) of its ownership interest is _____ %
in the patent application/patent identified above by virtue of either:

A. [] An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 014739, Frame 0045, or for which a copy thereof is attached.

OR

B. [] A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.
2. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.
3. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

[] Additional documents in the chain of title are listed on a supplemental sheet.

[] Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

July 30, 2004
Date
011-88-83-563-6668
Telephone number

Hsien-Wei Chou
Typed or printed name
[Signature]
Signature
Director, IP Division
Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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ASSIGNMENT

WHEREAS, we,

- | | | | |
|-----|----------------|----|---|
| (1) | Hsien-Wei Chen | of | No. 57, Suitang St., Xinying City,
Taiwan County 730, Taiwan, R.O.C. |
| (2) | Jiun-Lin Yeh | of | 3 F., No. 2, Sec. 1, Minsheng E. Rd.,
Jhongshan District,
Taipei City 104 Taiwan, RO.C. |
| (3) | Hsin-Puu Jeng | of | No. 10, Lane 36, Hu-Bin 1 st Rd.
Hsin-chu, Taiwan, R.O.C. |
| (4) | Yi-Lung Cheng | of | 9 F., No. 25, Lane 42, Danhai Rd.
Danshuei Township
Taipei County, 251, Taiwan, R.O.C. |

have invented certain improvements in

**A SYSTEM AND METHOD OF
HEAT DISSIPATION IN SEMICONDUCTOR DEVICES**

for which we have executed an application for Letters Patent of the United States of America,

 of even date filed herewith; and
 X filed on March 16, 2004, and assigned application number 10/801,475; and

WHEREAS, we authorize the attorney of record to update this document to include Patent Office information as deemed necessary (i.e., filing date, serial number, etc.);

WHEREAS, Taiwan Semiconductor Manufacturing Company, Ltd., ("TSMC"), No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park, Hsin-Chu, Taiwan 300-77, Republic of China. is desirous of obtaining the entire right, title, and interest in, to and under the said invention and the said application in the United States of America and in any and all countries foreign thereto;

NOW, THEREFORE, for One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and other good and valuable consideration, we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said TSMC, its successors, legal representatives, and assigns, the entire right, title, and interest in, to and under the said invention, and the said application, and all divisional, renewal, substitutional, and continuing applications thereof, and all Letters Patent of the United States of America which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may be filed for said invention in any country or countries foreign to the United States of America, and all extensions, renewals, and reissues thereof, and all prior patents and patent applications from which a filing priority of the above-described patent application may be obtained, including the right to collect past damages; and we hereby authorize and request the Commissioner of Patents of the United States of America, and any official of any country or countries foreign to the United States of America, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said invention to the said TSMC, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to said TSMC, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceedings, sign all lawful papers, execute all divisional, renewal, substitutional, continuing, and reissue applications, make all rightful declarations and/or oaths and generally do everything possible to aid the said TSMC, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention in all countries.

Inventor Name: Hsien-Wei Chen

Residence Address: No. 57, Suitang St., Xinying City, Tainan County 730, Taiwan (R.O.C.)

Dated: 2004/3/30

Hsien-Wei Chen
Inventor Signature

Inventor Name: Jiun-Lin Yeh

Residence Address: 3F., No. 2, Sec. 1, Minsheng E. Rd., Zhongshan District, Taipei City 104, Taiwan (R.O.C.)

Dated: 2004/3/30

Jiun-Lin Yeh
Inventor Signature

Inventor Name: Shin-Puu Jeng

Residence Address: No. 10, Lane 36, Hu-Bin 1st Rd, Hsinchu, TAIWAN

Dated: 2004/3/31

SLJ
Inventor Signature

Inventor Name: Yi-Lung Cheng

Residence Address: 9F., NO. 25, Lane 42, Danhai Rd, Danshuei Township, Taipei Country, 251, Taiwan (R.O.C.)

Dated: 2004/3/30

Yi-Lung Cheng
Inventor Signature

R-69722.1